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<p>(21) International Application Number: PCT/US99/10422 (22) International Filing Date: 12 May 1999 (12.05.99) (71) Applicant (for all designated States except US): THE GOODYEAR TIRE & RUBBER COMPANY [US/US]; D/823, 1144 East Market Street, Akron, OH 44316-0001 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): ARNOLD, John, Eric [US/US]; 2928 Aylesbury Street, NW, North Canton, OH 44720 (US). TROWBRIDGE, Mark, Guy [US/US]; 2203 East Arndale Road, Stow, OH 44224 (US). (74) Agent: KRAWCZYK, Nancy, T.; D/823, The Goodyear Tire & Rubber Company, 1144 East Market Street, Akron, OH 44316-0001 (US).</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p>

(54) Title: AIRSPRING AND AIRSPRING RETAINER

(57) Abstract

An airspring (10) has a cylindrical flexible airsleeve (14), retainers (12, 26) secured to each end of the airsleeve, and a piston. The lower retainer (26) has an integral bumper-contact surface (52) that extends into the chamber formed by the secured airsleeve. The bumper-contact surface of the lower retainer acts as a bumper within the airspring. The retainer has ribs (34, 40, 42, 44, 46) that act to absorb and transmit the forces encountered by the retainer when the lower retainer and the upper retainer contact during operation of the airspring.

